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LOGINID:SSPTANXR1625

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JUL 02	LMEDLINE coverage updated
NEWS 3	JUL 02	SCISEARCH enhanced with complete author names
NEWS 4	JUL 02	CHEMCATS accession numbers revised
NEWS 5	JUL 02	CA/CAplus enhanced with utility model patents from China
NEWS 6	JUL 16	CAplus enhanced with French and German abstracts
NEWS 7	JUL 18	CA/CAplus patent coverage enhanced
NEWS 8	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 9	JUL 30	USGENE now available on STN
NEWS 10	AUG 06	CAS REGISTRY enhanced with new experimental property tags
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NEWS 12	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
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NEWS 14	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 15	AUG 27	USPATOLD now available on STN
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NEWS 17	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
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NEWS 19	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 20	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 21	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 22	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 24	OCT 19	BEILSTEIN updated with new compounds
NEWS 25	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 26	NOV 19	WPIX enhanced with XML display format

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 08:36:33 ON 20 NOV 2007

=> file casreact
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CASREACT' ENTERED AT 08:36:46 ON 20 NOV 2007

FILE CONTENT:1840 - 17 Nov 2007 VOL 147 ISS 22

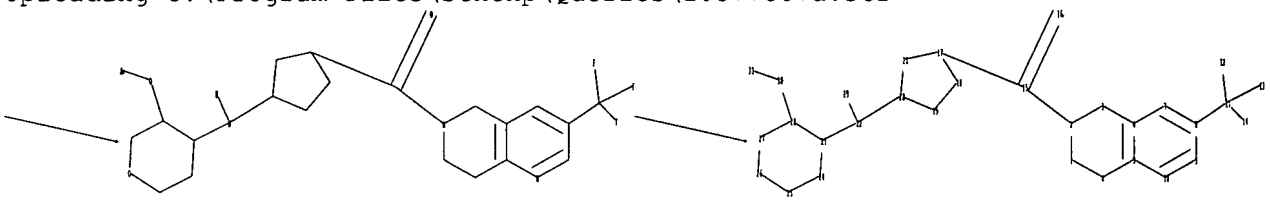
New CAS Information Use Policies, enter HELP USAGETERMS for details.

****
*
* CASREACT now has more than 13.8 million reactions *
*
****

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>
Uploading C:\Program Files\Stnexp\Queries\10577587a.str



chain nodes :
11 12 13 14 15 16 22 29 30 31
ring nodes :
1 2 3 4 5 6 7 8 9 10 17 18 19 20 21 23 24 25 26 27 28
chain bonds :
2-15 8-11 11-12 11-13 11-14 15-16 15-17 20-22 22-23 22-29 28-30 30-31
ring bonds :
1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 17-18 17-21 18-19 19-20
20-21 23-24 23-28 24-25 25-26 26-27 27-28
exact/norm bonds :
1-2 1-6 2-3 2-15 3-4 5-6 15-16 20-22 22-23 28-30
exact bonds :
8-11 11-12 11-13 11-14 15-17 17-18 17-21 18-19 19-20 20-21 22-29 23-24
23-28 24-25 25-26 26-27 27-28 30-31

normalized bonds :
4-5 4-7 5-10 7-8 8-9 9-10
isolated ring systems :
containing 1 : 17 : 23 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:Atom 18:Atom
19:Atom 20:Atom 21:Atom 22:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom
28:Atom 29:CLASS 30:CLASS 31:CLASS
fragments assigned product role:
containing 1

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full
FULL SEARCH INITIATED 08:37:08 FILE 'CASREACT'
SCREENING COMPLETE - 556 REACTIONS TO VERIFY FROM 3 DOCUMENTS

100.0% DONE 556 VERIFIED 131 HIT RXNS 2 DOCS
SEARCH TIME: 00.00.02

L2 2 SEA SSS FUL L1 (131 REACTIONS)

=> d ibib fhit abs tot

L2 ANSWER 1 OF 2 CASREACT COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 142:482029 CASREACT
TITLE: Preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2 antagonist
INVENTOR(S): Cai, Dongwei; Fleitz, Fred; Ge, Min; Hoerrner, Scott; Javadi, Gary; Jensen, Mark; Larsen, Robert; Li, Wenjie; Nelson, Dorian; Szumigala, Elizabeth; Yang, Lihu; Zhou, Changyou
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005044795	A1	20050519	WO 2004-US35294	20041025

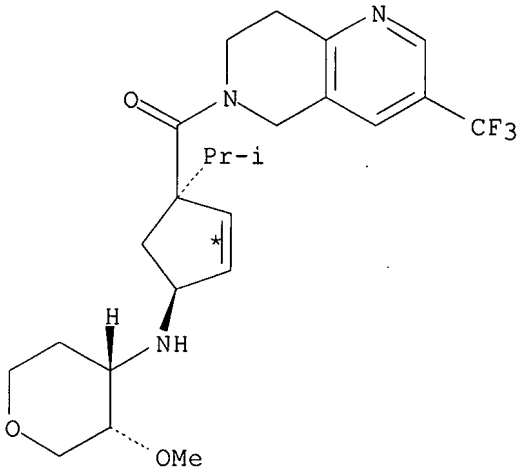
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

AU 2004287810	A1	20050519	AU 2004-287810	20041025
CA 2543250	A1	20050519	CA 2004-2543250	20041025
EP 1682500	A1	20060726	EP 2004-796305	20041025
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004015862	A	20070109	BR 2004-15862	20041025
JP 2007509944	T	20070419	JP 2006-538149	20041025
IN 2006DN02137	A	20070629	IN 2006-DN2137	20060419
US 2007135475	A1	20070614	US 2006-577587	20060427
PRIORITY APPLN. INFO.:			US 2003-514754P	20031027
			WO 2004-US35294	20041025

OTHER SOURCE(S): MARPAT 142:482029

RX(4) OF 288 ...N ===> R



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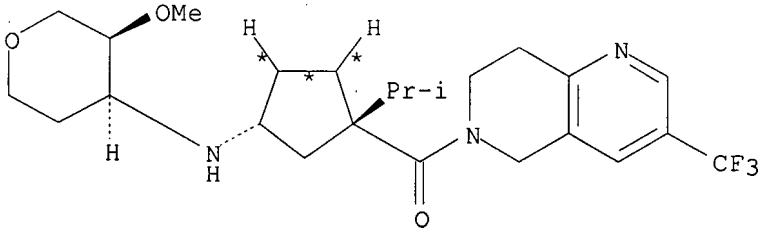

R
YIELD 99%

RX(4) RCT N 625097-29-2
RGT S 1333-74-0 H2
PRO R 624733-88-6

CAT 7440-05-3 Pd
SOL 67-56-1 MeOH
CON SUBSTAGE(1) 25 deg C
SUBSTAGE(2) 18 hours, 25 deg C, 40 psi

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention provides an efficient synthesis for the preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine (I) and its succinate salt. The present invention addnl. provides an efficient syntheses for the preparation of intermediates, i.e. (3R)-3-methoxytetrahydro-4H-pyran-4-one (II), (1S,4S)-4-(2,5-dimethyl-1H-pyrrol-1-yl)-1-isopropylcyclopent-2-ene-1-carboxylic acid (III), and 3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,6-naphthyridine (IV), and for the preparation of the precursor (3S,4S)-N-((1S,4S)-4-isopropyl-4-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopent-2-en-1-yl)-3-methoxytetrahydro-2H-pyran-4-amine (V). The invention addnl. resides in the superior properties of the I succinate. Thus, 730 g III was treated with 228 mL methanesulfonyl chloride in the presence of 0.93 L diisopropylethylamine in 6.6 L THF at 0-13°, stirred at room temperature for 4 h, cooled to .apprx.15°, treated with IV.HCl, warmed to 23°, treated with 0.93 L diisopropylethylamine with cooling at .apprx.25° over 15 min, and aged for .apprx.1 h to give 1.055 kg the compound (VI). VI (1.055 kg) in MeOH was added to 1 kg hydroxylamine hydrochloride, 50% aqueous hydroxylamine (1 L), and 5 L H2O, and the resulting slurry was refluxed at 71° for 6 h to give, after treatment with anhydrous HCl in isopropanol, the amine dihydrochloride (VII) (0.76 kg). VII (777 g) was slurried in 3 L iso-Pr acetate and the mixture was cooled in an ice bath, successively treated with 860 mL n-Bu3N, 260 mL isopropanol, and sodium triacetoxyborohydride (724 g, at 5°), and after 1 h, treated with a solution of II in iso-Pr acetate (1.76 L of a 160 g/L solution), and allowed to react for 6 h to give 654 g crude V (90%). V (640 g) was diluted with 6.4 L MeOH, charged to an autoclave, treated with a slurry of 256 g 5% Pd-C in 5.0 L MeOH, and hydrogenated under H pressure of 40 psi at 25° overnight to give a solution of 633 g I in MeOH (98.5%) which was concentrated to an oil (770 g). The oil was dissolved in 3.1 L iso-Pr acetate and the solution was concentrated to a brown oil. Dilution with iso-Pr acetate and concentration was repeated two addnl. times. The resulting oil was converted into I benzenesulfonate (1.645 kg) by treating with 283 g benzenesulfonic acid in iso-Pr acetate and treatment with heptane and the resulting benzenesulfonate salt was treated with a mixture of K2CO3, H2O, and iso-Pr acetate to give an oil containing 1.16 kg I. The latter oil was treated with 294 g succinic acid in ethanol and heptane to give 1.328 kg I succinate.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 2 CASREACT COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 142:482028 CASREACT
TITLE: Preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2 antagonist
INVENTOR(S): Jensen, Mark; Larsen, Robert; Sidler, Daniel Richard
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005044264	A1	20050519	WO 2004-US35069	20041025
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004287416	A1	20050519	AU 2004-287416	20041025
CA 2543201	A1	20050519	CA 2004-2543201	20041025
EP 1682135	A1	20060726	EP 2004-796120	20041025
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR			
CN 1870998	A	20061129	CN 2004-80031594	20041025
BR 2004015836	A	20070102	BR 2004-15836	20041025
JP 2007509940	T	20070419	JP 2006-538125	20041025
IN 2006DN02140	A	20070810	IN 2006-DN2140	20060419
MX 2006PA04647	A	20060627	MX 2006-PA4647	20060426
US 2007135474	A1	20070614	US 2006-577584	20060427
NO 2006002377	A	20060524	NO 2006-2377	20060524
PRIORITY APPLN. INFO.:			US 2003-514735P	20031027
			WO 2004-US35069	20041025

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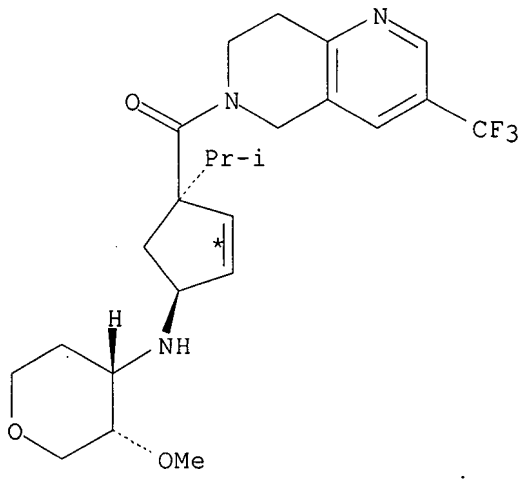

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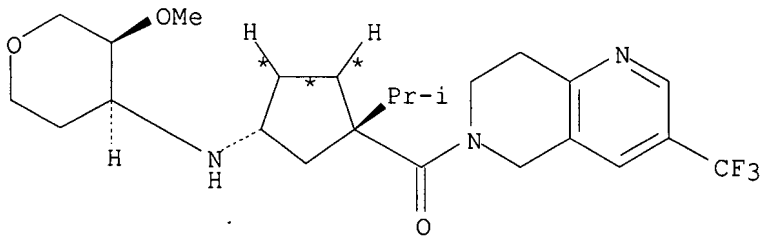

O
YIELD 99%

RX(3) RCT N 625097-29-2
RGT P 1333-74-0 H2
PRO O 624733-88-6
CAT 7440-05-3 Pd
SOL 67-56-1 MeOH
CON 18 hours, 25 deg C, 40 psi
NTE Pd adsorbed on carbon used as catalyst, reaction carried out in autoclave, industrial manufacture

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention provides an efficient synthesis for the preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine (I) and its succinate salt. The present invention addnl. provides an efficient syntheses for the preparation of intermediates, i.e. (3R)-3-methoxytetrahydro-4H-pyran-4-one (II), (1S,4S)-4-(2,5-dimethyl-1H-pyrrol-1-yl)-1-isopropylcyclopent-2-ene-1-carboxylic acid (III), and 3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,6-naphthyridine (IV), and for the preparation of the precursor (3S,4S)-N-((1S,4S)-4-isopropyl-4-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopent-2-en-1-yl)-3-methoxytetrahydro-2H-pyran-4-amine (V). The invention addnl. resides in the superior properties of the I succinate. I succinate is useful for treating, ameliorating, controlling or reducing the risk of an inflammatory and immunoregulatory disorder or disease or rheumatoid arthritis. Thus, 730 g III was treated with 228 mL methanesulfonyl chloride in the presence of 0.93 L diisopropylethylamine in 6.6 L THF at 0-13°, stirred at room temperature for 4 h, cooled to .apprx.15°, treated with IV.HCl, warmed to 23°, treated with 0.93 L diisopropylethylamine with cooling at .apprx.25° over 15 min, and aged for .apprx.1 h to give 1.055 kg the compound (VI). VI (1.055 kg) in MeOH was added to 1 kg hydroxylamine hydrochloride, 50% aqueous hydroxylamine (1 L), and 5 L H2O, and the resulting slurry was refluxed at 71° for 6 h to give, after treatment with anhydrous HCl in isopropanol, the amine dihydrochloride (VII) (0.76 kg). VII (777 g) was slurried in 3 L iso-Pr acetate and the mixture was cooled in an ice bath, successively treated with 860 mL n-Bu3N, 260 mL isopropanol, and sodium triacetoxyborohydride (724 g, at 5°), and after 1 h, treated with a solution of II in iso-Pr acetate (1.76 L of a 160 g/L solution), and allowed to react for 6 h to give 654 g crude V (90%). V (640 g) was diluted with 6.4 L MeOH, charged to an autoclave, treated with a slurry of 256 g 5% Pd-C in 5.0 L MeOH, and hydrogenated under H pressure of 40 psi at 25° overnight to give a solution of 633 g I in MeOH (98.5%) which was concentrated to an oil (770 g). The oil was dissolved in 3.1 L iso-Pr acetate and the solution was concentrated to a

brown oil. Dilution with iso-Pr acetate and concentration was repeated two addnl.
times. The resulting oil was converted into I benzenesulfonate (1.645 kg) by treating with 283 g benzenesulfonic acid in iso-Pr acetate and treatment with heptane and the resulting benzenesulfonate salt was treated with a mixture of K2CO3, H2O, and iso-Pr acetate to give an oil containing 1.16 kg I. The latter oil was treated with 294 g succinic acid in ethanol and heptane to give 1.328 kg I succinate.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> dhis
DHIS IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d his

(FILE 'HOME' ENTERED AT 08:36:33 ON 20 NOV 2007)

FILE 'CASREACT' ENTERED AT 08:36:46 ON 20 NOV 2007
L1 STRUCTURE UPLOADED
L2 2 S L1 FULL

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	123.84	124.05
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.46	-1.46

STN INTERNATIONAL LOGOFF AT 08:37:57 ON 20 NOV 2007

Connecting via Winsock to STN

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LOGINID:SSPTANXR1625

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

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NEWS 2	JUL 02	LMEDLINE coverage updated
NEWS 3	JUL 02	SCISEARCH enhanced with complete author names
NEWS 4	JUL 02	CHEMCATS accession numbers revised
NEWS 5	JUL 02	CA/CAplus enhanced with utility model patents from China
NEWS 6	JUL 16	CAplus enhanced with French and German abstracts
NEWS 7	JUL 18	CA/CAplus patent coverage enhanced
NEWS 8	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
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NEWS 25	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 26	NOV 19	WPIX enhanced with XML display format

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

result in loss of user privileges and other penalties.

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FILE 'HOME' ENTERED AT 08:31:35 ON 20 NOV 2007

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:31:54 ON 20 NOV 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 19 NOV 2007 HIGHEST RN 954997-95-6
DICTIONARY FILE UPDATES: 19 NOV 2007 HIGHEST RN 954997-95-6

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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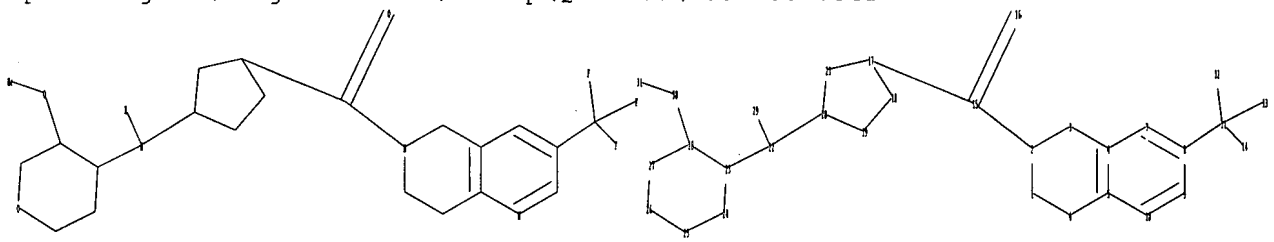


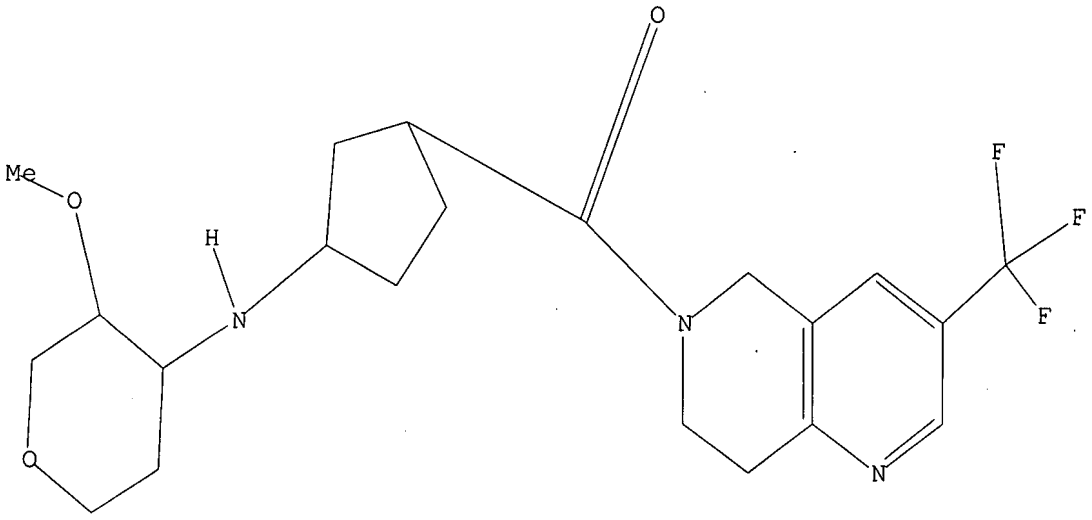
chain nodes :
11 12 13 14 15 16 22 29 30 31
ring nodes :
1 2 3 4 5 6 7 8 9 10 17 18 19 20 21 23 24 25 26 27 28
chain bonds :
2-15 8-11 11-12 11-13 11-14 15-16 15-17 20-22 22-23 22-29 28-30 30-31
ring bonds :
1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 17-18 17-21 18-19 19-20
20-21 23-24 23-28 24-25 25-26 26-27 27-28
exact/norm bonds :
1-2 1-6 2-3 2-15 3-4 5-6 15-16 20-22 22-23 28-30
exact bonds :
8-11 11-12 11-13 11-14 15-17 17-18 17-21 18-19 19-20 20-21 22-29 23-24
23-28 24-25 25-26 26-27 27-28 30-31

normalized bonds :
4-5 4-7 5-10 7-8 8-9 9-10
isolated ring systems :
containing 1 : 17 : 23 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:Atom 18:Atom
19:Atom 20:Atom 21:Atom 22:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom
28:Atom 29:CLASS 30:CLASS 31:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 6 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 44 TO 476
PROJECTED ANSWERS: 6 TO 266

L2 6 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 08:32:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 241 TO ITERATE

100.0% PROCESSED 241 ITERATIONS 84 ANSWERS
SEARCH TIME: 00.00.01

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L3            84 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   172.10     172.31

FILE 'CAPLUS' ENTERED AT 08:32:26 ON 20 NOV 2007
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FILE LAST UPDATED: 19 Nov 2007  (20071119/ED)

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=> s l3/prep full
            8 L3
      4491967 PREP/RL
L4            7 L3/PREP
                  (L3 (L) PREP/RL)

=> d ibib abs hitstr tot

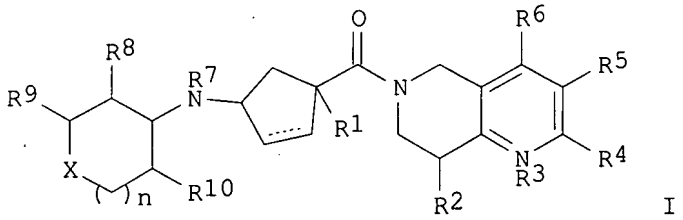
L4   ANSWER 1 OF 7  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2006:121960  CAPLUS
DOCUMENT NUMBER:          144:212759
TITLE:                    Preparation of tetrahydropyranylaminocyclopentylcarbon
                          yltetrahydropyridopyridines as modulators of CCR2
                          chemokine receptor activity.
INVENTOR(S):              Demartino, Julie; Akiyama, Taro; Struthers, Mary;
                          Yang, Lihu; Berger, Joel P.; Morriello, Gregori;
                          Pastemak, Alexander; Zhou, Changyou; Mills, Sander G.;
                          Butora, Gabor; Kothandaraman, Shankaran; Guiadeen,
                          Deodialsingh; Tang, Cheng; Jiao, Richard; Goble,
                          Stephen D.; Moyes, Christopher
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 84 pp., Cont.-in-part of Ser.
                          No. US 2004-923594, filed on 20 Aug 2004
                          whichCont.-in-pa
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   4
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
     US 2006030582        A1    20060209    US 2005-102417          20050408
     US 2004167156        A1    20040826    US 2003-425167          20030429
```

US 6812234	B2	20041102			
US 2005107422	A1	20050519	US 2004-923594		20040820
US 7230008	B2	20070612			
EP 1627636	A1	20060222	EP 2005-270011		20050418
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU					
PRIORITY APPLN. INFO.:			US 2002-376180P	P	20020429
			US 2003-425167	A2	20030429
			US 2004-923594	A2	20040820
			US 2002-376291P	P	20020429
			US 2005-102417	A	20050408

OTHER SOURCE(S): MARPAT 144:212759

GI



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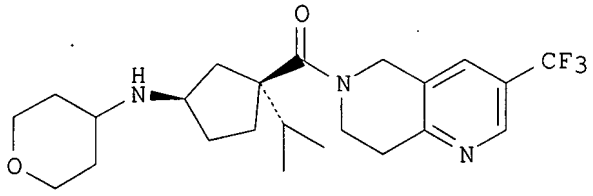


II

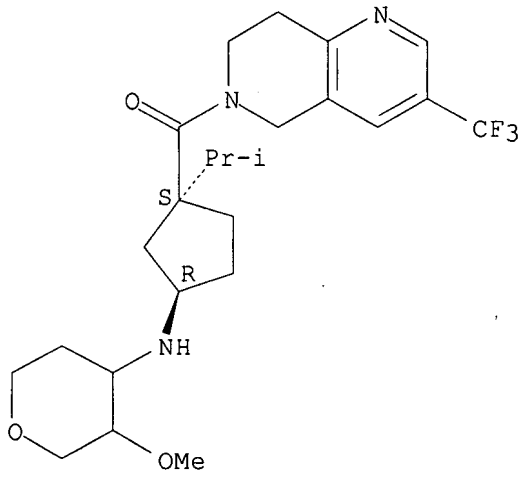
AB Title compds. [I; X = O, NR20, S, SO, SO2, CR21R22, NSO2R20, NCOR20, CO, etc.; R20 = H, (substituted) alkyl, Ph, PhCH2, cycloalkyl; R21, R22 = H, OH, (substituted) alkyl, alkoxy, Ph, PhCH2, cycloalkyl; R1 = (substituted) alkyl, alkoxyalkyl, alkylthioalkyl, heterocyclyl, cyano, Ph, CO2R20, NHCOR20, etc.; R2 = H, OH, halo, CO2R20, (substituted) alkyl, etc.; R3 = O, null; R4 = H, alkyl, CF3, OCF3, Cl, F, Br, Ph; R5 = (substituted) alkyl, alkoxy, alkylcarbonyl, Ph, PhO, pyridyl, CO2R20, etc.; R6 = H, alkyl, CF3, F, Cl, Br; R7 = H, (substituted) alkyl; R8 = H, F, OH, cycloalkyloxy, (substituted) alkyl, CO2R20, etc.; R9 = H, OH, (substituted) alkyl, alkoxy, CO2R20; R8R9 = atoms to form a 3-6 membered ring; R10 = H, F, cycloalkoxy, (substituted) alkyl; R8R10 = atoms to form a 6-8 membered ring; n = 0-2; dashed line = optional double bond], were prepared Thus, title compound (II) was prepared in many steps. I generally showed IC50 values of <1 μM in a CCR-2 receptor binding assay.

IT 625097-14-5P 625097-40-7P 625097-89-4P
851983-90-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tetrahydropyranylaminocyclopentylcarbonyltetrahydropyridopyridines as modulators of CCR2 chemokine receptor activity)

RN 625097-14-5 CAPLUS

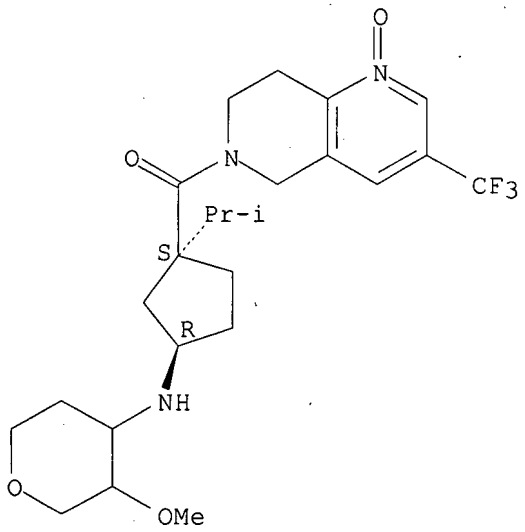
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



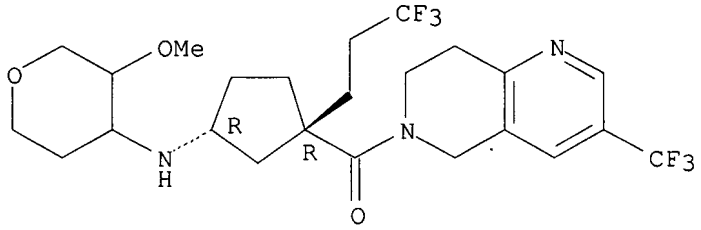
RN 625097-40-7 CAPLUS
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 625097-89-4 CAPLUS
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3R)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(3,3,3-trifluoropropyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

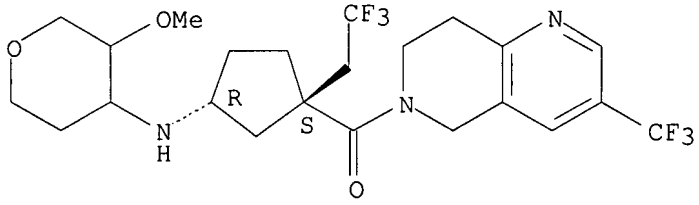
Absolute stereochemistry.



RN 851983-90-9 CAPLUS

CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:431408 CAPLUS
DOCUMENT NUMBER: 142:482030
TITLE: Tetrahydropyranyl cyclopentyl tetrahydropyridopyridine modulators of chemokine receptor activity
INVENTOR(S): Jiao, Richard; Butora, Gabor; Goble, Stephen D.; Guiadeen, Deodialsingh; Mills, Sander G.; Morriello, Gregori; Pasternak, Alexander; Tang, Cheng; Yang, Lihu; Zhou, Changyou; Kothandaraman, Shankaran; Moyes, Christopher
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 86 pp., Cont.-in-part of U.S. Ser. No. 425,167.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005107422	A1	20050519	US 2004-923594	20040820
US 7230008	B2	20070612		
US 2004167156	A1	20040826	US 2003-425167	20030429
US 6812234	B2	20041102		
US 2006030582	A1	20060209	US 2005-102417	20050408
EP 1627636	A1	20060222	EP 2005-270011	20050418
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				

PRIORITY APPLN. INFO.:

US 2002-376180P	P	20020429
US 2002-376291P	P	20020429
US 2003-425167	A2	20030429
US 2004-923594	A2	20040820
US 2005-102417	A	20050408

OTHER SOURCE(S): MARPAT 142:482030
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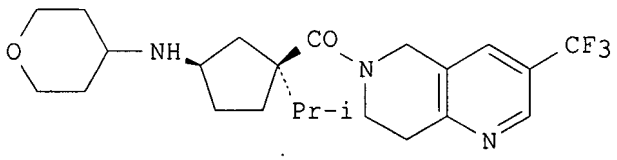

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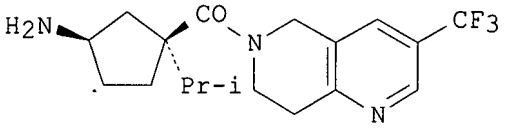


II

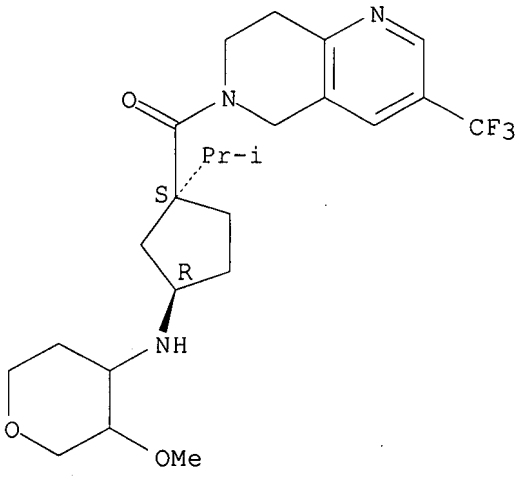
AB The present invention is directed to methods for treating, preventing, ameliorating, controlling or reducing the risk of an inflammatory or immunoregulatory disorder or disease, which method comprises the administration to a patient of an effective amount of the title compds. which are useful as modulators of chemokine receptor activity. In particular, these compds. are useful as modulators of the chemokine receptor CCR-2. E.g., I was prepared by reaction of the synthesized intermediate II with tetrahydro-4H-pyran-4-one in the presence of Na triacetoxyborohydride.

IT 625097-14-5P 625097-40-7P 625097-89-4P
851983-90-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(tetrahydropyranyl cyclopentyl tetrahydropyridopyridine modulators of chemokine receptor activity)

RN 625097-14-5 CAPLUS

CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

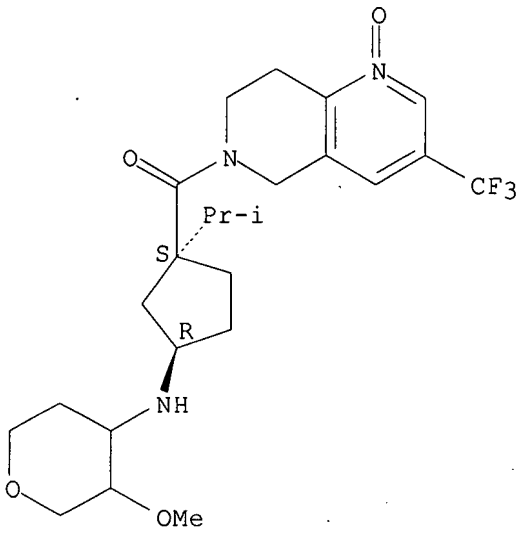
Absolute stereochemistry.



RN 625097-40-7 CAPLUS

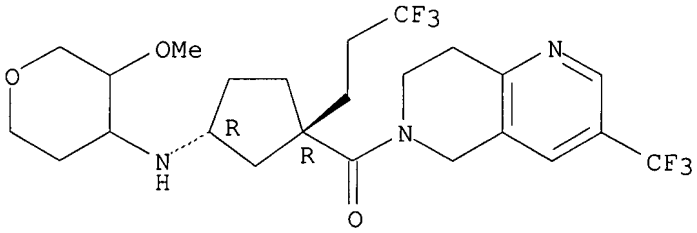
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



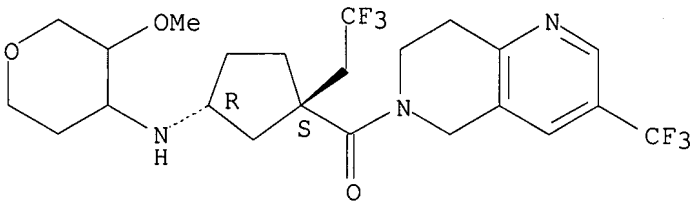
RN 625097-89-4 CAPLUS
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3R)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(3,3,3-trifluoropropyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 851983-90-9 CAPLUS
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:426567 CAPLUS
DOCUMENT NUMBER: 142:482029
TITLE: Preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2

antagonist

INVENTOR(S): Cai, Dongwei; Fleitz, Fred; Ge, Min; Hoerrner, Scott; Javadi, Gary; Jensen, Mark; Larsen, Robert; Li, Wenjie; Nelson, Dorian; Szumigala, Elizabeth; Yang, Lihu; Zhou, Changyou

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005044795	A1	20050519	WO 2004-US35294		20041025
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2004287810	A1	20050519	AU 2004-287810		20041025
CA 2543250	A1	20050519	CA 2004-2543250		20041025
EP 1682500	A1	20060726	EP 2004-796305		20041025
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BR 2004015862	A	20070109	BR 2004-15862		20041025
JP 2007509944	T	20070419	JP 2006-538149		20041025
IN 2006DN02137	A	20070629	IN 2006-DN2137		20060419
US 2007135475	A1	20070614	US 2006-577587		20060427
PRIORITY APPLN. INFO.:			US 2003-514754P	P	20031027
			WO 2004-US35294	W	20041025

OTHER SOURCE(S): CASREACT 142:482029; MARPAT 142:482029

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention provides an efficient synthesis for the preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine (I) and its succinate salt. The present invention addnl. provides an efficient syntheses for the preparation of intermediates, i.e. (3R)-3-methoxytetrahydro-4H-pyran-4-one (II), (1S,4S)-4-(2,5-dimethyl-1H-pyrrol-1-yl)-1-isopropylcyclopent-2-ene-1-carboxylic acid (III), and 3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,6-naphthyridine (IV), and for the preparation of the precursor (3S,4S)-N-((1S,4S)-4-isopropyl-4-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopent-2-en-1-yl)-3-methoxytetrahydro-2H-pyran-4-amine (V). The invention addnl. resides in the superior properties of the I succinate. Thus, 730 g III was treated with 228 mL methanesulfonyl chloride in the presence of 0.93 L diisopropylethylamine in 6.6 L THF at 0-13°, stirred at room temperature for 4 h, cooled to .apprx.15°, treated with IV.HCl, warmed to 23°, treated with 0.93 L diisopropylethylamine with cooling at .apprx.25° over 15 min, and aged for .apprx.1 h to give 1.055 kg the compound (VI). VI (1.055 kg) in MeOH was added to 1 kg hydroxylamine hydrochloride, 50% aqueous hydroxylamine (1 L), and 5 L H2O, and the resulting

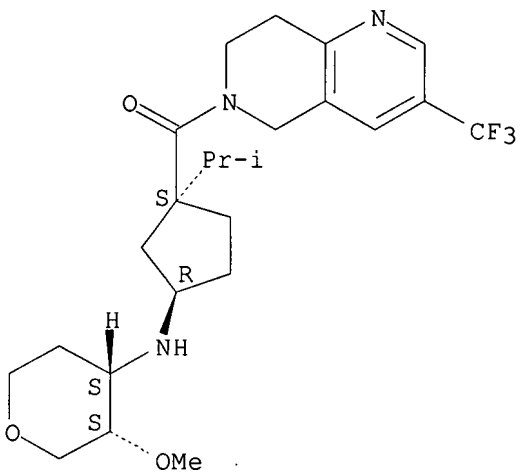
slurry was refluxed at 71° for 6 h to give, after treatment with anhydrous HCl in isopropanol, the amine dihydrochloride (VII) (0.76 kg). VII (777 g) was slurried in 3 L iso-Pr acetate and the mixture was cooled in an ice bath, successively treated with 860 mL n-Bu3N, 260 mL isopropanol, and sodium triacetoxyborohydride (724 g, at 5°), and after 1 h, treated with a solution of II in iso-Pr acetate (1.76 L of a 160 g/L solution), and allowed to react for 6 h to give 654 g crude V (90%). V (640 g) was diluted with 6.4 L MeOH, charged to an autoclave, treated with a slurry of 256 g 5% Pd-C in 5.0 L MeOH, and hydrogenated under H pressure of 40 psi at 25° overnight to give a solution of 633 g I in MeOH (98.5%) which was concentrated to an oil (770 g). The oil was dissolved in 3.1 L iso-Pr acetate and the solution was concentrated to a brown oil. Dilution with iso-Pr acetate and concentration was repeated two addnl. times. The resulting oil was converted into I benzenesulfonate (1.645 kg) by treating with 283 g benzenesulfonic acid in iso-Pr acetate and treatment with heptane and the resulting benzenesulfonate salt was treated with a mixture of K2CO3, H2O, and iso-Pr acetate to give an oil containing 1.16 kg I. The latter oil was treated with 294 g succinic acid in ethanol and heptane to give 1.328 kg I succinate.

IT 624733-88-6P
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2 antagonist)

RN 624733-88-6 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



IT 851916-42-2P 851916-43-3P
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2 antagonist)

RN 851916-42-2 CAPLUS

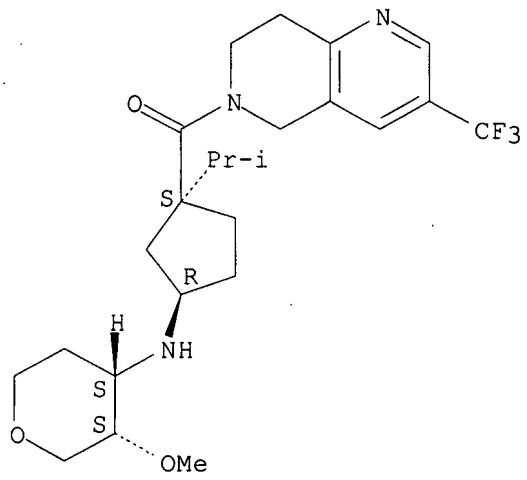
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-

methylethyl)cyclopentyl]amino]-4-O-methyl-, butanedioate (1:1) (salt)
(9CI) (CA INDEX NAME)

CM 1

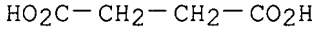
CRN 624733-88-6
CMF C24 H34 F3 N3 O3

Absolute stereochemistry.



CM 2

CRN 110-15-6
CMF C4 H6 O4

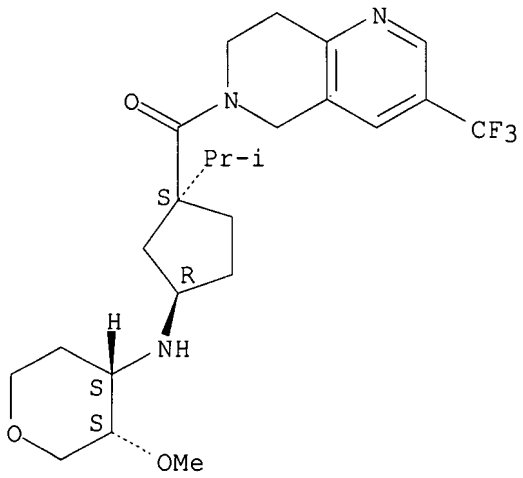


RN 851916-43-3 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, monobenzenesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

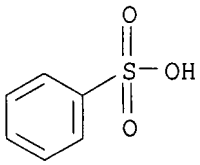
CRN 624733-88-6
CMF C24 H34 F3 N3 O3

Absolute stereochemistry.



CM 2

CRN 98-11-3
CMF C6 H6 O3 S



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:426431 CAPLUS
DOCUMENT NUMBER: 142:482028
TITLE: Preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2 antagonist
INVENTOR(S): Jensen, Mark; Larsen, Robert; Sidler, Daniel Richard
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005044264	A1	20050519	WO 2004-US35069	20041025

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2004287416	A1	20050519	AU 2004-287416		20041025
CA 2543201	A1	20050519	CA 2004-2543201		20041025
EP 1682135	A1	20060726	EP 2004-796120		20041025
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR					
CN 1870998	A	20061129	CN 2004-80031594		20041025
BR 2004015836	A	20070102	BR 2004-15836		20041025
JP 2007509940	T	20070419	JP 2006-538125		20041025
IN 2006DN02140	A	20070810	IN 2006-DN2140		20060419
MX 2006PA04647	A	20060627	MX 2006-PA4647		20060426
US 2007135474	A1	20070614	US 2006-577584		20060427
NO 2006002377	A	20060524	NO 2006-2377		20060524
PRIORITY APPLN. INFO.:			US 2003-514735P	P	20031027
			WO 2004-US35069	W	20041025

OTHER SOURCE(S): CASREACT 142:482028
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention provides an efficient synthesis for the preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine (I) and its succinate salt. The present invention addnl. provides an efficient syntheses for the preparation of intermediates, i.e. (3R)-3-methoxytetrahydro-4H-pyran-4-one (II), (1S,4S)-4-(2,5-dimethyl-1H-pyrrol-1-yl)-1-isopropylcyclopent-2-ene-1-carboxylic acid (III), and 3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,6-naphthyridine (IV), and for the preparation of the precursor (3S,4S)-N-((1S,4S)-4-isopropyl-4-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopent-2-en-1-yl)-3-methoxytetrahydro-2H-pyran-4-amine (V). The invention addnl. resides in the superior properties of the I succinate. I succinate is useful for treating, ameliorating, controlling or reducing the risk of an inflammatory and immunoregulatory disorder or disease or rheumatoid arthritis. Thus, 730 g III was treated with 228 mL methanesulfonyl chloride in the presence of 0.93 L diisopropylethylamine in 6.6 L THF at 0-13°, stirred at room temperature for 4 h, cooled to .apprx.15°, treated with IV.HCl, warmed to 23°, treated with 0.93 L diisopropylethylamine with cooling at .apprx.25° over 15 min, and aged for .apprx.1 h to give 1.055 kg the compound (VI). VI (1.055 kg) in MeOH was added to 1 kg hydroxylamine hydrochloride, 50% aqueous hydroxylamine (1 L), and 5 L H2O, and the resulting slurry was refluxed at 71° for 6 h to give, after treatment with anhydrous HCl in isopropanol, the amine dihydrochloride (VII) (0.76 kg). VII (777 g) was slurried in 3 L iso-Pr acetate and the mixture was cooled in an ice bath, successively treated with 860 mL n-Bu3N, 260 mL isopropanol, and sodium triacetoxyborohydride (724 g, at 5°), and after 1 h, treated with a solution of II in iso-Pr acetate (1.76 L of a 160 g/L solution), and allowed to react for 6 h to give 654 g crude V (90%). V (640 g) was diluted with 6.4 L MeOH, charged to an autoclave, treated with a slurry of 256 g 5% Pd-C in 5.0 L MeOH, and hydrogenated under H pressure of 40 psi at 25° overnight to give a solution of 633 g I in MeOH (98.5%) which was concentrated to an oil (770 g). The oil was dissolved in 3.1 L iso-Pr acetate and the solution was concentrated to a brown oil. Dilution with iso-Pr acetate and concentration was repeated two addnl. times. The resulting oil was converted into I benzenesulfonate (1.645 kg) by treating with 283 g benzenesulfonic acid in iso-Pr acetate and

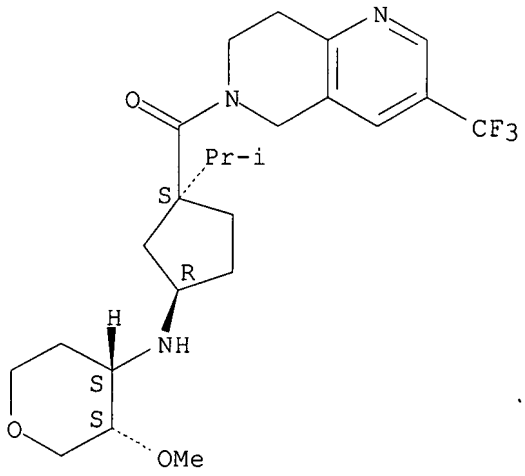
treatment with heptane and the resulting benzenesulfonate salt was treated with a mixture of K2CO3, H2O, and iso-Pr acetate to give an oil containing 1.16 kg I. The latter oil was treated with 294 g succinic acid in ethanol and heptane to give 1.328 kg I succinate.

IT 624733-88-6P
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2 antagonist)

RN 624733-88-6 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



IT 851916-42-2P 851916-43-3P
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2 antagonist)

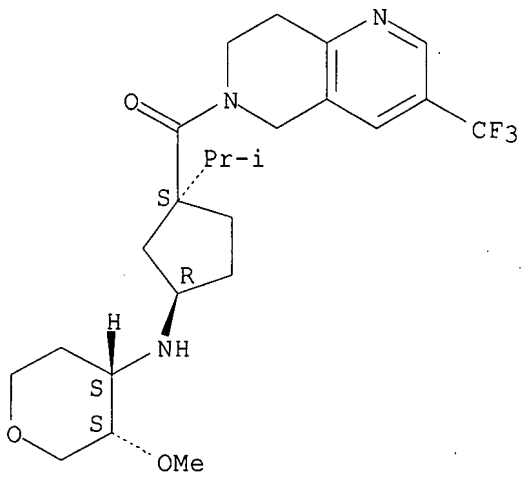
RN 851916-42-2 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, butanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 624733-88-6
CMF C24 H34 F3 N3 O3

Absolute stereochemistry.



CM 2

CRN 110-15-6
CMF C4 H6 O4

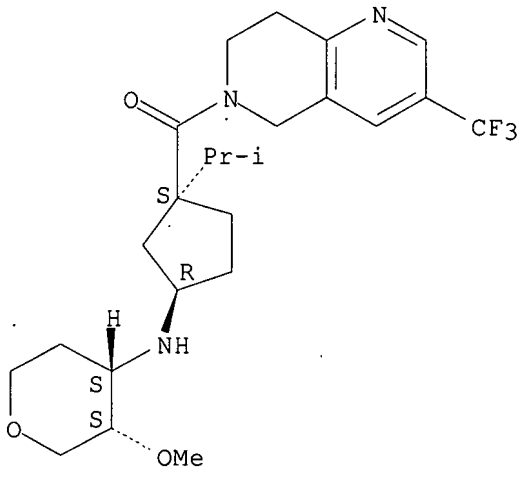
$HO_2C-CH_2-CH_2-CO_2H$

RN 851916-43-3 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, monobenzenesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

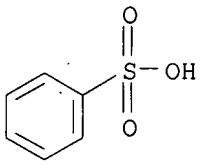
CRN 624733-88-6
CMF C24 H34 F3 N3 O3

Absolute stereochemistry.



CM 2

CRN 98-11-3
CMF C6 H6 O3 S



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1124588 CAPLUS
DOCUMENT NUMBER: 142:69197
TITLE: CCR-2 antagonists for treatment of neuropathic pain
INVENTOR(S): Abbadie, Catherine; Lindia, Jill Ann; Wang, Hao
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 304 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110376	A2	20041223	WO 2004-US17499	20040602
WO 2004110376	A3	20050224		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2006205761	A1	20060914	US 2005-559701	20051206

PRIORITY APPLN. INFO.:		
US 2003-476391P	P	20030606
US 2003-531637P	P	20031222
WO 2004-US17499	W	20040602

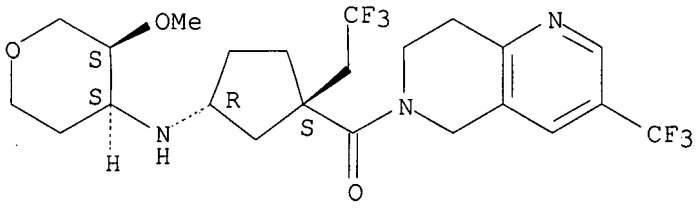
OTHER SOURCE(S): MARPAT 142:69197

AB The invention is directed to methods of treating neuropathic pain and other neuropathic diseases and conditions with CCR-2 antagonists and pharmaceutical composition containing CCR-2 antagonists.

IT 625097-60-1P 625097-61-2P 625097-62-3P
625097-63-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(CCR2 antagonists for treatment of neuropathic pain)

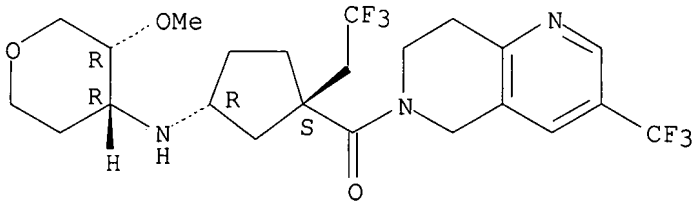
RN 625097-60-1 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



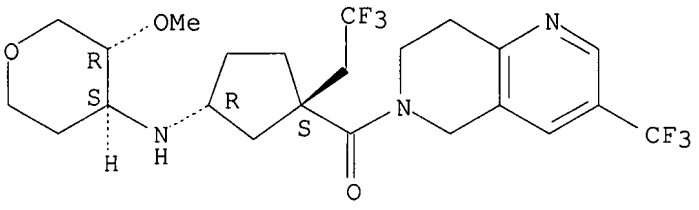
RN 625097-61-2 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-2-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



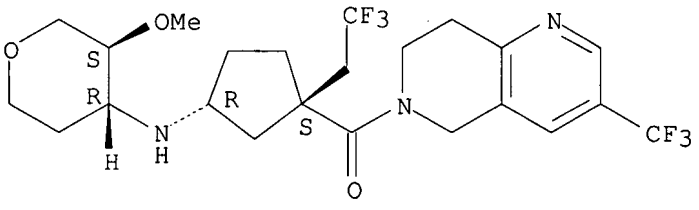
RN 625097-62-3 CAPLUS
CN L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 625097-63-4 CAPLUS
CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

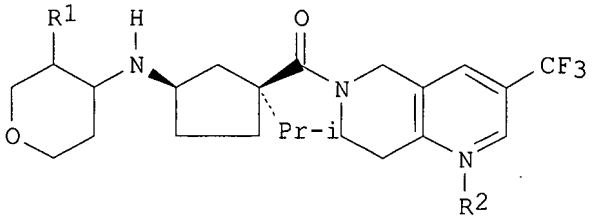


L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:892775 CAPLUS
DOCUMENT NUMBER: 139:381471
TITLE: Preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity

INVENTOR(S): Jiao, Richard; Morriello, Gregori; Yang, Lihu; Moyes, Christopher
PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Merck Sharp & Dohme Limited
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003093266	A1	20031113	WO 2003-US13042		20030425
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
TW 262077	B	20060921	TW 2003-92109364		20030422
AU 2003234251	A1	20031117	AU 2003-234251		20030425
BR 2003009650	A	20050426	BR 2003-9650		20030425
CN 1662532	A	20050831	CN 2003-815041		20030425
RU 2285004	C2	20061010	RU 2004-134604		20030425
US 2005101628	A1	20050512	US 2004-856012		20040528
IN 2004CN02443	A	20070330	IN 2004-CN2443		20041027
MX 2004PA10702	A	20050217	MX 2004-PA10702		20041028
NO 2004005235	A	20041129	NO 2004-5235		20041129
PRIORITY APPLN. INFO.:			US 2002-376291P	P	20020429
			WO 2003-US13042	W	20030425

OTHER SOURCE(S): MARPAT 139:381471
GI



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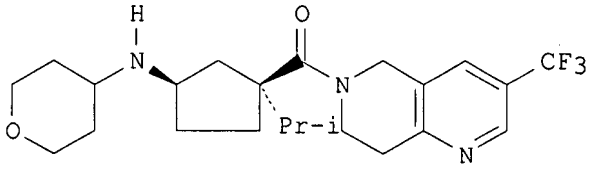


II

AB Title compds. I (R1 = H, F, OH, alkoxy, or alkyl optionally substituted with 1-6 fluoro atoms; R2 = O or absent) and their pharmaceutically acceptable salts are prepared and disclosed as modulators of chemokine receptor activity. Thus, II was prepared by condensation of tetrahydro-4H-pyran-4-one with the corresponding aminocyclopentane precursor (preparation given). In particular, these compds. are useful as

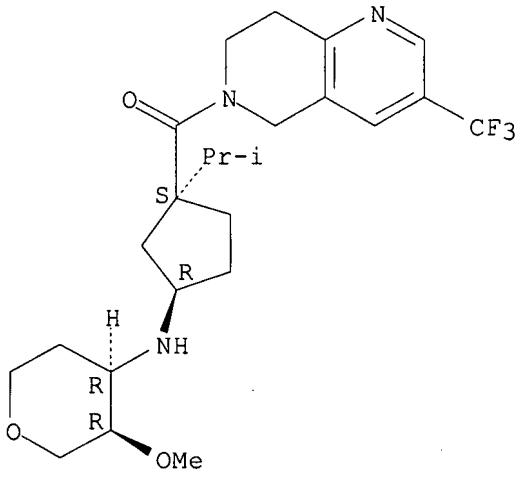
modulators of the chemokine receptor CCR-2. I was found generally to possess an IC50 value of less than about 1 μM in binding to the CCR-2 receptor in performed assays.

IT 624733-87-5P 624733-88-6P 624733-89-7P
624733-90-0P 624734-12-9P 624734-13-0P
624734-14-1P 624734-15-2P
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity)

RN 624733-87-5 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-2-O-methyl- (CA INDEX NAME)

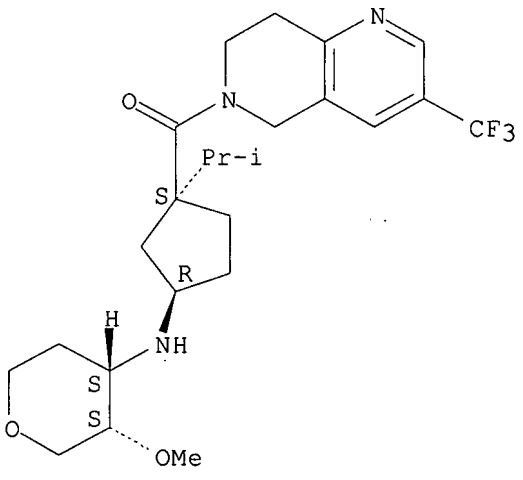
Absolute stereochemistry.



RN 624733-88-6 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.

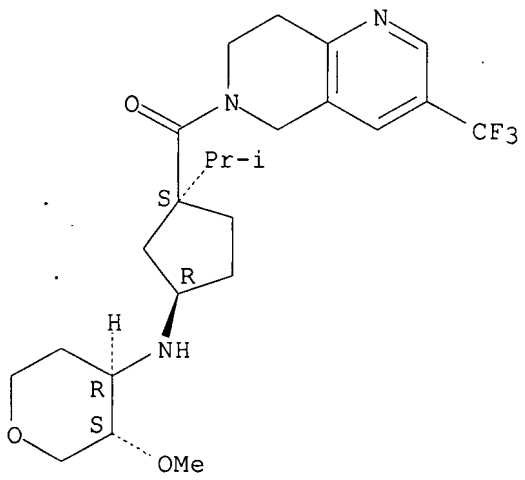


RN 624733-89-7 CAPLUS

CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-

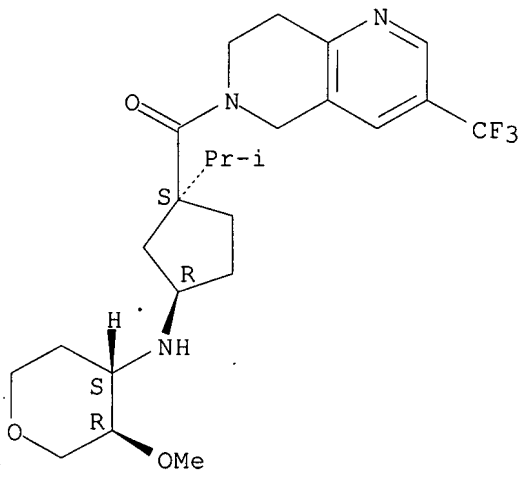
(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



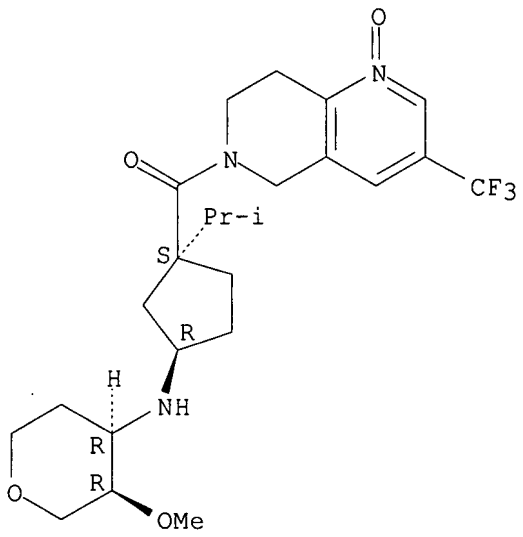
RN 624733-90-0 CAPLUS
CN L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



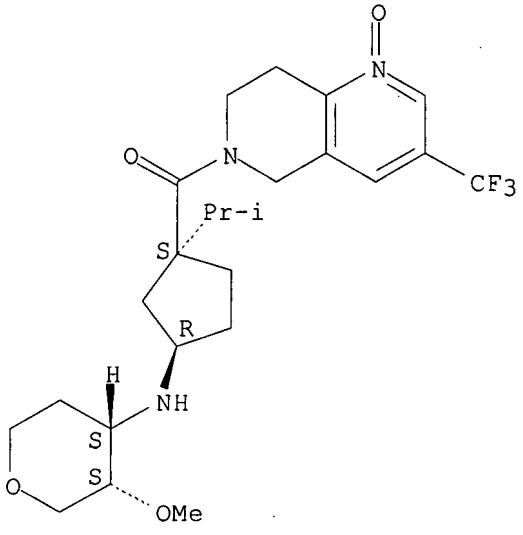
RN 624734-12-9 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-2-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



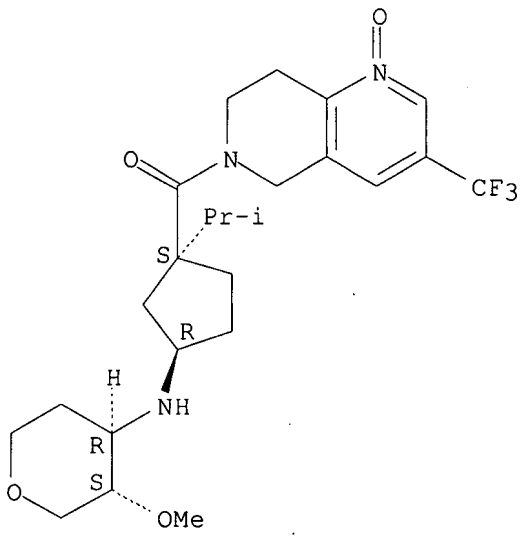
RN 624734-13-0 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



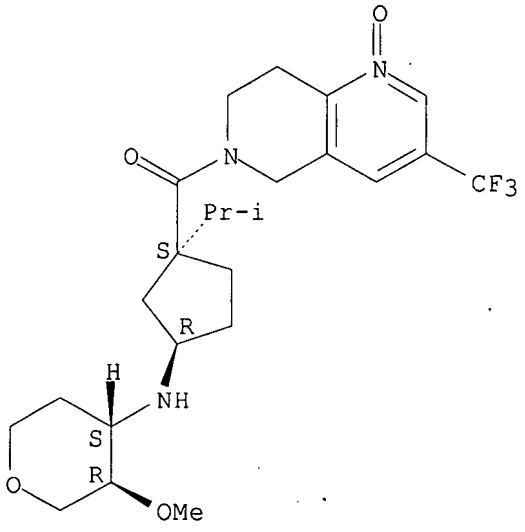
RN 624734-14-1 CAPLUS
CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 624734-15-2 CAPLUS
CN L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

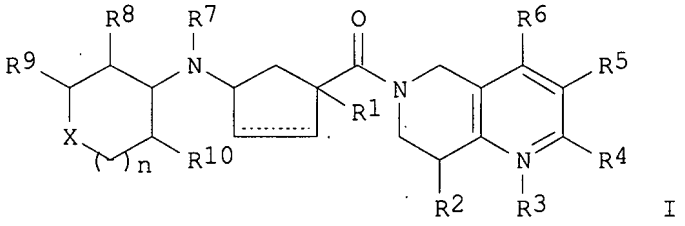
L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:892537 CAPLUS
DOCUMENT NUMBER: 139:381470
TITLE: Preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridine as modulators of chemokine receptor activity
INVENTOR(S): Jiao, Richard; Morriello, Gregori; Yang, Lihu; Goble, Stephen D.; Mills, Sander G.; Pasternak, Alexander; Zhou, Changyou; Butora, Gabor; Kothandaraman, Shankaran; Guiadeen, Deodialsingh; Tang, Cheng; Moyes, Christopher
PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Merck Sharp & Dohme Limited

SOURCE: PCT Int. Appl., 207 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003092586	A2	20031113	WO 2003-US12929	20030425
WO 2003092586	A3	20040916		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2483752	A1	20031113	CA 2003-2483752	20030425
AU 2003231114	A1	20031117	AU 2003-231114	20030425
EP 1501507	A2	20050202	EP 2003-724241	20030425
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
NZ 536477	A	20050527	NZ 2003-536477	20030425
JP 2005523929	T	20050811	JP 2004-500771	20030425
JP 3780291	B2	20060531		
ZA 2004007940	A	20060628	ZA 2004-7940	20041001

PRIORITY APPLN. INFO.:
US 2002-376180P P 20020429
WO 2003-US12929 W 20030425

OTHER SOURCE(S): MARPAT 139:381470
GI



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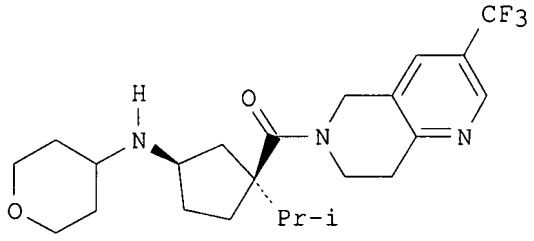


II

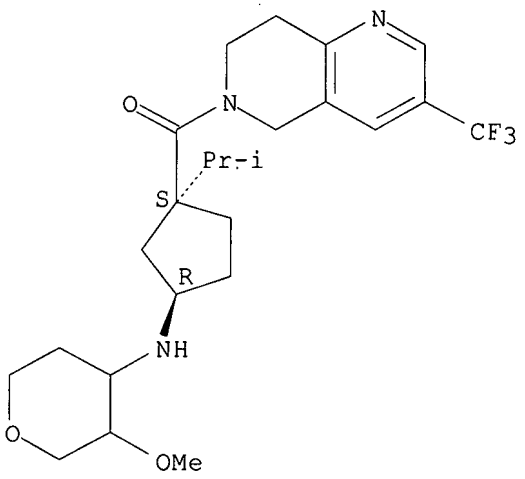
AB Title compds. I (X = O, S, SO2, CR11R12, etc.; R1 = OH, (un)substituted alkyl, alkyloxyalkyl, Ph, heterocycle, etc.; , R2 = H, OH, halo, CN, heterocycle, (un)substituted alkyl, etc.; R3 = O or absent; R4 H, alkyl, F3C, F3CO, Cl, Br, F, and Ph; R5 = F, Cl, Br, CN, (un)substituted alkyl, thioalkyl, etc.; R6 = H, alkyl, F3C, F, Cl, Br; R7 = H, (un)substituted

alkyl; R8 = H, OH, F, (un)substituted alkyl, or R7 and R8 may joined to from a carbocycle or heterocycle, etc.; R9 = H, OH, (un)substituted alkyl, alkyloxy, carboxylate, or R8 and R9 may together from a carbocycle or heterocycle, etc.; R10 = H, F, cycloalkyloxy, (un)substituted alkyloxy, alkyl, or R8 and R10 may together form a 5-6 membered (un)substituted ring; R11 and R12 = independently H, OH, (un)substituted alkyl, benzyl, cycloalkyl, etc.; n = 0-2) and their pharmaceutically acceptable salts were prepared and disclosed as modulators of chemokine receptor activity. Thus, II was prepared by condensation of tetrahydro-4H-pyran-4-one with the corresponding amino cyclopentyl precursor (preparation given). In particular, these compds. are useful as modulators of the chemokine receptor CCR-2. I had activity in binding to the CCR-2 receptor generally with an IC50 of less than about 1 μM.

IT 625097-14-5P 625097-40-7P 625097-89-4P
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(claimed compound; preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity)

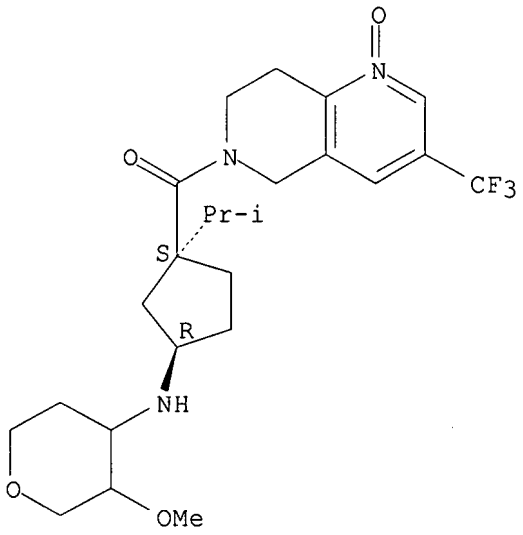
RN 625097-14-5 CAPLUS
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



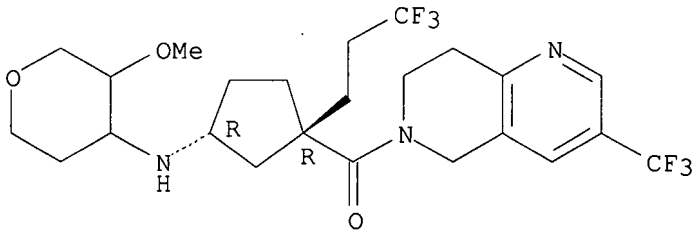
RN 625097-40-7 CAPLUS
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



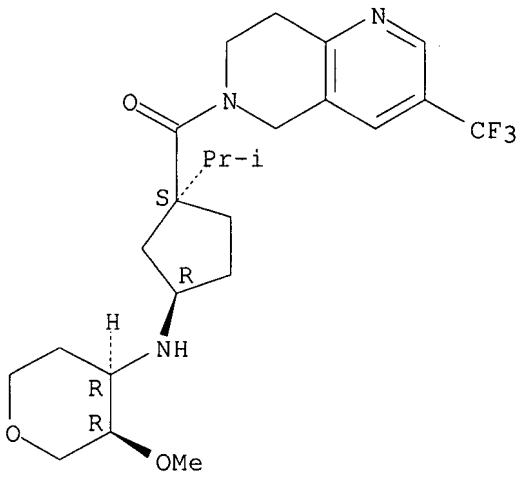
RN 625097-89-4 CAPLUS
CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3R)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(3,3,3-trifluoropropyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



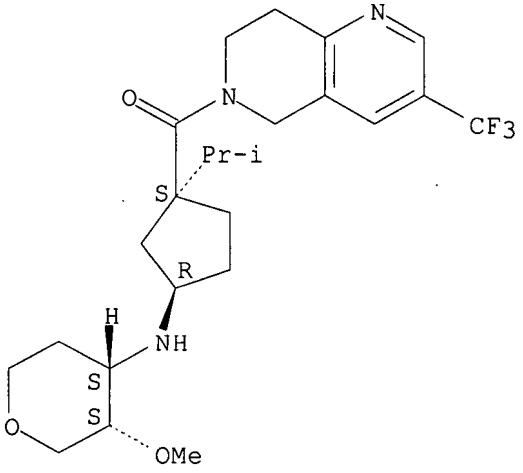
IT 624733-87-5P 624733-88-6P 624733-89-7P
624734-12-9P 624734-13-0P 624734-14-1P
624734-15-2P
RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(claimed compound; preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity)
RN 624733-87-5 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-2-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



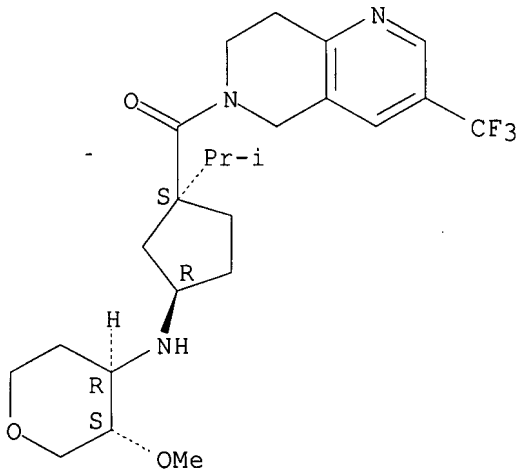
RN 624733-88-6 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



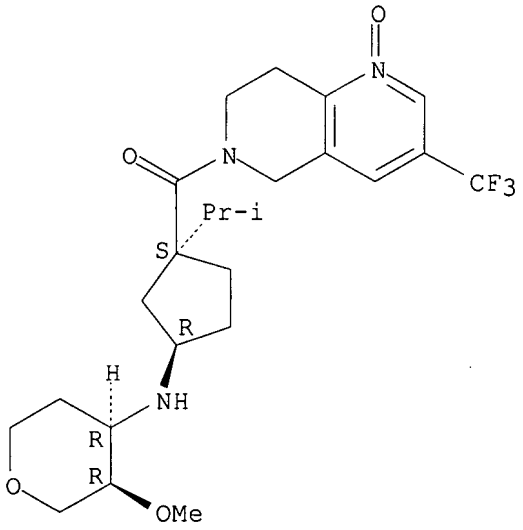
RN 624733-89-7 CAPLUS
CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



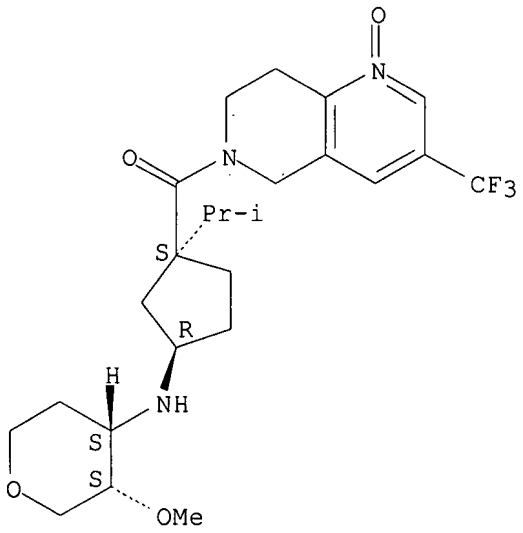
RN 624734-12-9 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-2-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



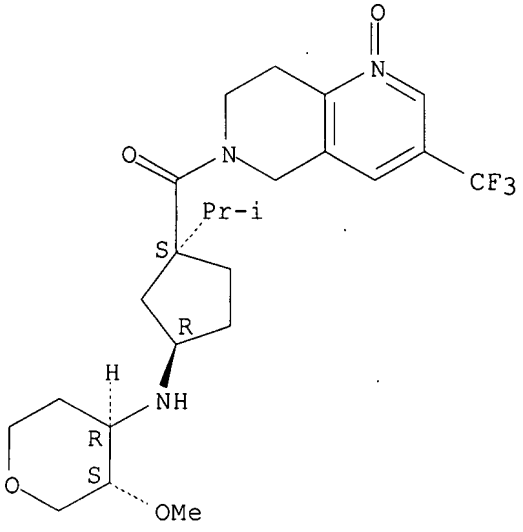
RN 624734-13-0 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



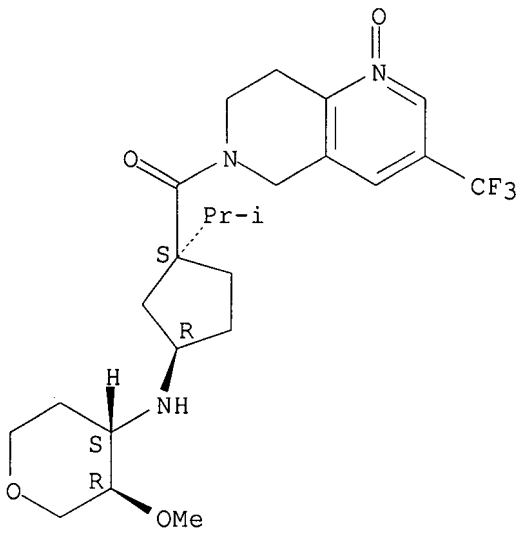
RN 624734-14-1 CAPLUS
CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 624734-15-2 CAPLUS
CN L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

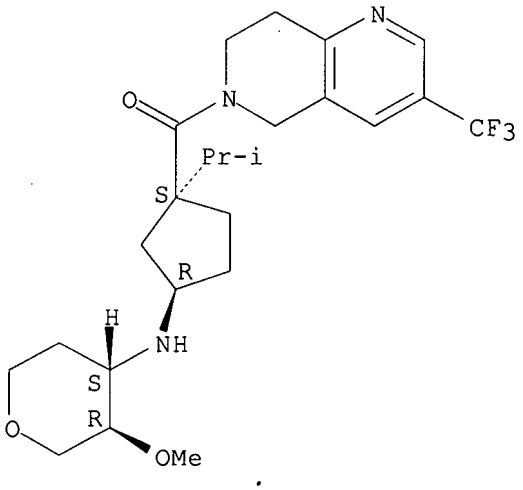


IT 624733-90-0P 625097-60-1P 625097-61-2P
625097-62-3P 625097-63-4P 625097-90-7P
625097-91-8P 625097-92-9P 625097-93-0P
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity)

RN 624733-90-0 CAPLUS

CN L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

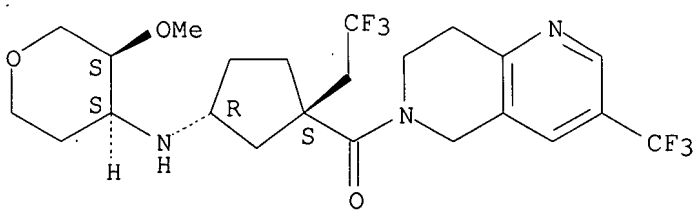
Absolute stereochemistry.



RN 625097-60-1 CAPLUS

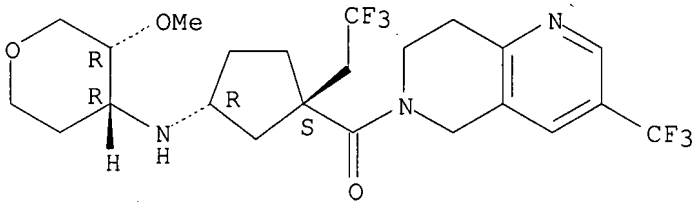
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



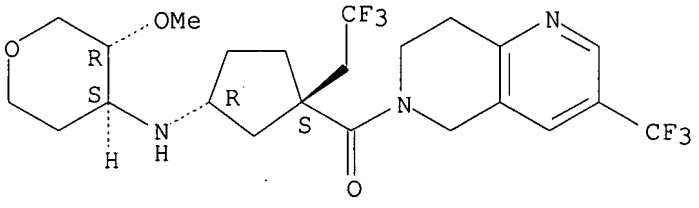
RN 625097-61-2 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-2-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



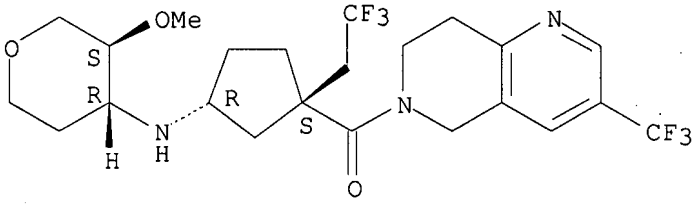
RN 625097-62-3 CAPLUS
CN L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



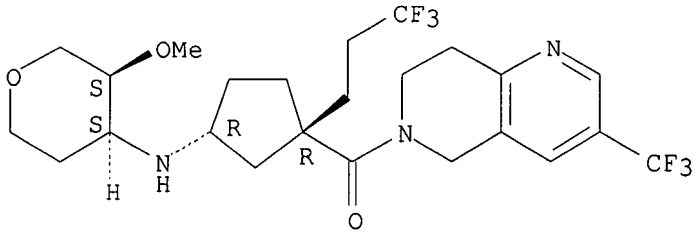
RN 625097-63-4 CAPLUS
CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(2,2,2-trifluoroethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



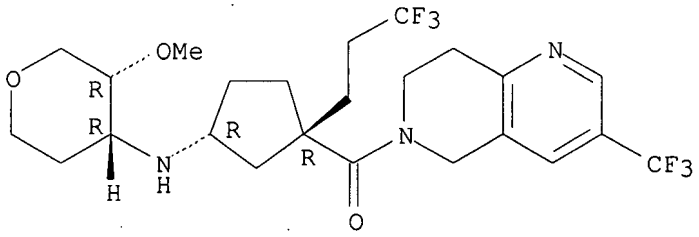
RN 625097-90-7 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3R)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(3,3,3-trifluoropropyl)cyclopentyl]amino]-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



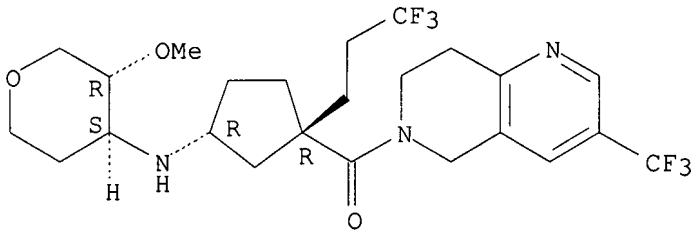
RN 625097-91-8 CAPLUS
CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3R)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(3,3,3-trifluoropropyl)cyclopentyl]amino]-2-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



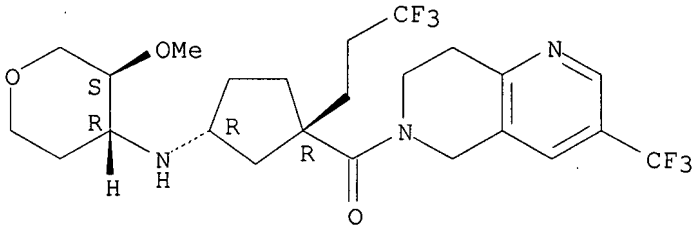
RN 625097-92-9 CAPLUS
CN L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3R)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(3,3,3-trifluoropropyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 625097-93-0 CAPLUS
CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3R)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(3,3,3-trifluoropropyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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     FILE 'REGISTRY' ENTERED AT 08:31:54 ON 20 NOV 2007
L1              STRUCTURE UPLOADED
L2            6 S L1
L3           84 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 08:32:26 ON 20 NOV 2007
L4            7 S L3/PREP FULL

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    40.78     213.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -5.46      -5.46

STN INTERNATIONAL LOGOFF AT 08:35:04 ON 20 NOV 2007
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